

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for determining whether a client communication system seeking access to a host communication system is authorized to do so, the method comprising:

receiving, at the host, from the client communication system, a user-independent client-communication-system-specific identifier and results of a first mathematical computation performed at the client on a first user-dependent access identifier ~~an access password~~ and the user-independent client-communication-system-specific identifier;

accessing, at the host and based on the receipt of the user-independent client communication-system-specific identifier, a second user dependent access identifier, a password;

performing a second mathematical computation using the accessed second user-dependent access identifier ~~password~~ and the user-independent client-communication-system-specific identifier received from the client communication system;

comparing results of the first and second mathematical computations; and

designating a client communication system as unauthorized based on the comparison of the results of the first and second mathematical computations,

wherein the user-independent client-communication-system-specific identifier is derived from information that identifies at least a hardware component or aspect of the client communication system.

2. (Previously Presented) The method of claim 1, wherein either the first or second mathematical computations comprises a hashing algorithm.

3. (Previously Presented) The method of claim 1, wherein the first mathematical computation is performed when a communication is initiated.

4. (Currently Amended) The method of claim 1, wherein the first and second user-dependent access identifiers comprise~~access password comprises~~ a subscriber password.

5. (Currently Amended) The method of claim 1, wherein the first and second user-dependent access identifiers comprise~~access password comprises~~ a user password.

6. (Currently Amended) The method of claim 1, wherein the first and second user-dependent access identifiers comprise~~access password comprises~~ an account password.

7. (Canceled)

8. (Currently Amended) The method of claim 1, wherein the user-independent client-communication-system-specific identifier comprises a device-specific identifier.

9. (Original) The method of claim 8, wherein the device-specific identifier comprises a hard disk identifier.

10. (Original) The method of claim 8, wherein the device-specific identifier comprises an Ethernet address.

11. (Original) The method of claim 8, wherein the device-specific identifier comprises a central processing unit serial number.

12. (Original) The method of claim 8, wherein the device-specific identifier comprises a description of the storage characteristics of the hard disk.

13-15. (Canceled)

16. (Previously Presented) The method of claim 1, further comprising sending a notification to the client communication system indicating the designation of the client communication system as an unauthorized client communication system if the result of the first mathematical computation does not correspond to the result of the second mathematical computation.

17. (Previously Presented) The method of claim 1, further comprising terminating communications from the client communication system if the result of the first mathematical computation does not correspond to result of the second mathematical computation.

18. (Previously Presented) The method of claim 17, wherein terminating communications is performed after a predetermined delay if the result of the first mathematical computation does not correspond to the result of the second mathematical computation.

19. (Currently Amended) A method for handling information about an authorized client communication system, the method comprising:

storing a version of a user-dependent access identifier ~~an access password~~;

storing a user-independent client-communication-system-specific identifier and results of a first mathematical computation performed, at a client communication system, on the user-dependent access identifier ~~access password~~ and the user-independent client-communication-system-specific identifier ~~from the client communication system retrieved from a client communication system~~;

performing a second mathematical computation on the stored version of the user-dependent access identifier ~~access password~~ and the retrieved user-independent client-communication-system-specific identifier, and

storing the results of the second mathematical computation,
wherein the user-independent client-communication-system-specific identifier is derived from information that identifies at least a hardware component or aspect of the client communication system.

20. (Currently Amended) The method of claim 19, wherein:
storing the result of the first mathematical computation comprises storing the result on the client communication system,
storing the [[a]] version of the user-dependent access identifier ~~an access password~~ comprises storing the version of the user-dependent access identifier ~~access password~~ on the host communication system.

21. (Canceled)

22. (Previously Presented) The method of claim 19, wherein either the first or second mathematical computations comprises a hashing algorithm.

23. (Currently Amended) The method of claim 19, wherein the user-dependent access identifier and the stored version of the user-dependent access identifier ~~access password~~ comprises a subscriber password.

24. (Currently Amended) The method of claim 19, wherein the user-dependent access identifier and the stored version of the user-dependent access identifier ~~access password~~ comprises a user password.

25. (Currently Amended) The method of claim 19, wherein the user-dependent access identifier and the stored version of the user-dependent access identifier ~~access password~~ comprises an account password.

26. (Canceled)

27. (Currently Amended) The method of claim 19, wherein the user-independent client-communication-system-specific identifier comprises a device-specific identifier.

28. (Original) The method of claim 27, wherein the device-specific identifier comprises a hard disk identifier.

29. (Original) The method of claim 27, wherein the device-specific identifier comprises an Ethernet address.

30. (Original) The method of claim 27, wherein the device-specific identifier comprises a central processing unit serial number.

31. (Original) The method of claim 27, wherein the device-specific identifier comprises a description of the storage characteristics of the hard disk.

32. (Currently Amended) A computer readable medium or propagated signal having embodied thereon a computer program for identifying an unauthorized client communication system seeking access to a host communication system, the computer program comprising:

a performing code segment for performing a first mathematical computation on a first user-dependent access identifier ~~an access password~~ and a user-independent client-communication-system-specific identifier;

a receiving code segment for receiving, at the host, from the client communication system, a user-independent client-communication-system-specific identifier and results of a first mathematical computation performed at the client on the first user-dependent access identifier ~~an access password~~ and the user-independent client-communication-system-specific identifier;

a ~~receiving~~ received code segment for retrieving, at the host, a second user-dependent access identifier password;

a performing code segment for performing a second mathematical computation using the received second user-dependent access identifier password and the user-independent client-communication-system-specific identifier received from the client communication system;

comparing results of the first and second mathematical computations; and

a designating code segment for designating a client communication system as unauthorized based on a results of the first and second mathematical computations,

wherein the user-independent client-communication-system-specific identifier is derived from information that identifies at least a hardware component or aspect of the client communication system.

33. (Previously Presented) The medium of claim 32, wherein either the first or second mathematical computations comprises a hashing algorithm.

34. (Previously Presented) The medium of claim 32, wherein the performing code segment performs the first mathematical computation when a communication is initiated.

35. (Currently Amended) The medium of claim 32, wherein the first and second user-dependent access identifiers comprise access password ~~comprises~~ a subscriber password.

36. (Currently Amended) The medium of claim 32, wherein the first and second user-dependent access identifiers comprise access password ~~comprises~~ a user password.

37. (Currently Amended) The medium of claim 32, wherein the first and second user-dependent access identifiers comprise access password ~~comprises~~ an account password.

38. (Canceled)

39. (Currently Amended) The medium of claim 32, wherein the user-independent client-communication-system-specific identifier comprises a device-specific identifier.

40. (Original) The medium of claim 39, wherein the device-specific identifier comprises a hard disk identifier.

41. (Original) The medium of claim 39, wherein the device-specific identifier comprises an Ethernet address.

42. (Original) The medium of claim 39, wherein the device-specific identifier comprises a central processing unit serial number.

43. (Original) The medium of claim 39, wherein the device-specific identifier comprises a description of the storage characteristics of the hard disk.

44-46. (Canceled)

47. (Previously Presented) The medium of claim 32, further comprising a notification code segment for sending a notification to the client communication system indicating the designation of the client communication system as an unauthorized client communication system if the result of the first mathematical computation does not correspond to the result of the second mathematical computation.

48. (Previously Presented) The medium of claim 32, further comprising a terminating code segment for terminating communications from the client communication system if the result of the first mathematical computation does not correspond to result of the second mathematical computation.

49. (Original) The medium of claim 48, wherein the terminating code segment terminates communications after a predetermined delay if the result of the first mathematical computation does not correspond to the result of the host-based mathematical computation.

50. (Currently Amended) A computer readable medium or propagated signal having embodied thereon a computer program for handling information about an authorized client communication system, the computer program comprising:

a user-dependent access identifier ~~an access password~~ storing code segment for storing a version of a user-dependent access identifier ~~an access password~~;

a storing code segment for storing, at the host, a user-independent client-communication-system-specific identifier and results of a first mathematical computation performed on the user-dependent access identifier ~~access password~~ and the user-independent client-communication-system-specific identifier;

a performing code segment for performing a second mathematical computation on the stored version of the user-dependent access identifier ~~access password~~ and the retrieved user-independent client-communication-system-specific identifier ~~from the client communication system retrieved from a client communication system~~; and

a computation storing code segment for storing the results of the second mathematical computations,

wherein the user-independent client-communication-system-specific identifier is derived from information that identifies at least a hardware component or aspect of the client communication system.

51. (Currently Amended) The medium of claim 50, wherein the performing code segment includes:

a computation storing code segment for storing the result of the first mathematical computation comprises storing the result on the client communication system,

a user-dependent access identifier ~~an access password~~ storing code segment to store the version of the user-dependent access identifier ~~an access password~~ comprises a code segment for storing the result on the host communication system.

52. (Canceled)

53. (Previously Presented) The medium of claim 50, wherein either the first or second mathematical computations comprises a hashing algorithm.

54. (Currently Amended) The medium of claim 50, wherein the user-dependent access identifier and the stored version of the user-dependent access identifier ~~access password~~ comprises a subscriber password.

55. (Currently Amended) The medium of claim 50, wherein the user-dependent access identifier and the stored version of the user-dependent access identifier ~~access password~~ comprises a user password.

56. (Currently Amended) The medium of claim 50, wherein the user-dependent access identifier and the stored version of the user-dependent access identifier ~~access password~~ comprises an account password.

57. (Canceled)

58. (Currently Amended) The medium of claim 50, wherein the user-independent client-communication system-specific identifier comprises a device-specific identifier.

59. (Original) The medium of claim 58, wherein the device-specific identifier comprises a hard disk identifier.

60. (Original) The medium of claim 58, wherein the device-specific identifier comprises an Ethernet address.

61. (Original) The medium of claim 58, wherein the device-specific identifier comprises a central processing unit serial number.

62. (Original) The medium of claim 58, wherein the device-specific identifier comprises a description of the storage characteristics of the hard disk.

63. (Currently Amended) An apparatus for identifying an unauthorized client communication system seeking access to a host communication system, the apparatus comprising:

a performing device structured and arranged to perform, at a client, a first mathematical computation on a first user-dependent access identifier ~~an access password~~ and a user-independent client-communication-system-specific identifier;

a receiving device structured and arranged to receive, at the host, from the client communication system, a user-independent client-communication-system-specific identifier and results of a first mathematical computation performed at the client on the first user-dependent access identifier ~~an access password~~ and the user-independent client-communication-system-specific identifier;

an accessing device structured and arranged to access, at the host, a second user-dependent access identifier ~~password~~;

a performing device structured and arranged to perform a second mathematical computation using the accessed second user-dependent access identifier ~~password~~ and the user-independent client-communication-system-specific identifier received from the client communication system;

a comparing device structured and arranged to compare results of the first and second mathematical computations; and

a designating device structured and arranged to designate a client communication system as unauthorized based on the results of the first and second mathematical computations,

wherein the user-independent client-communication-system-specific identifier is derived from information that identifies at least a hardware component or aspect of the client communication system.

64. (Previously Presented) The apparatus of claim 63, wherein either the first or second mathematical computations comprises a hashing algorithm.

65. (Previously Presented) The apparatus of claim 63, wherein the first mathematical computation is performed when a communication is initiated.

66. (Currently Amended) The apparatus of claim 63, wherein the first and second user-dependent access identifiers comprise access password ~~comprises~~ a subscriber password.

67. (Currently Amended) The apparatus of claim 63, wherein the first and second user-dependent access identifiers comprise access password ~~comprises~~ a user password.

68. (Currently Amended) The apparatus of claim 63, wherein the first and second user-dependent access identifiers comprise access password ~~comprises~~ an account password.

69. (Canceled)

70. (Currently Amended) The apparatus of claim 63, wherein the user-independent client-communication-system-specific identifier comprises a device-specific identifier.

71. (Original) The apparatus of claim 70, wherein the device-specific identifier comprises a hard disk identifier.

72. (Original) The apparatus of claim 70, wherein the device-specific identifier comprises an Ethernet address.

73. (Original) The apparatus of claim 70, wherein the device-specific identifier comprises a central processing unit serial number.

74. (Original) The apparatus of claim 70, wherein the device-specific identifier comprises a description of the storage characteristics of the hard disk.

75-77. (Canceled)

78. (Previously Presented) The apparatus of claim 63, further comprising a device structured and arranged to terminate communications from the client communication system if the result of the first mathematical computation does not correspond to result of the second mathematical computation.

79. (Currently Amended) An apparatus for handling information about an authorized client communication system, the apparatus comprising:

a user-dependent access identifier ~~an access password~~ device structured and arranged to store a version of a first user-dependent access identifier ~~an access password~~;

a receiving device structured and arranged to receive, at the host, from the client communication system, a user-independent client-communication-system-specific identifier and results of a first mathematical computation performed at the client on the first user-dependent access identifier ~~an access password~~ and the user-independent client-communication-system-specific identifier;

an accessing device structured and arranged to access, at the host, a second user-dependent access identifier password;

a performing device structured and arranged to perform a second mathematical computation using the accessed second user-dependent access identifier password and the user-independent client-communication-system-specific identifier received from the client communication system;

a comparing device structured and arranged to compare results of the first and second mathematical computations; and

~~a performing device structured and arranged to perform a second mathematical computation on the stored access password and the retrieved client-communication-system-specific identifier; and~~

~~a computation storing device structured and arranged to store the results of the second mathematical computations;~~

a designation device structured and arranged to designate a client communication system as unauthorized based on the comparison of the results of the first and second mathematical computations, and

wherein the user-independent client-communication-system-specific identifier is derived from information that identifies at least a hardware component or aspect of the client communication system.

80. (Currently Amended) The apparatus of claim 79, wherein the performing device includes:

a device for storing the result of the first mathematical computation comprises storing the result on the client communication system,

a user-dependent access identifier ~~an access password~~ storing device for storing the version of the first user-dependent access identifier ~~an access password~~ comprises storing the result on the host communication system.

81-82. (Canceled)

83. (Previously Presented) The apparatus of claim 79, wherein either the first or second mathematical computations comprises a hashing algorithm.

84. (Currently Amended) The apparatus of claim 79, wherein the first and second user-dependent access identifiers comprise ~~access password comprises~~ a subscriber password.

85. (Currently Amended) The apparatus of claim 79, wherein the first and second user-dependent access identifiers comprise ~~access password comprises~~ a user password.

86. (Currently Amended) The apparatus of claim 79, wherein the first and second user-dependent access identifiers comprise ~~access password comprises~~ an account password.

87. (Canceled)

88. (Currently Amended) The apparatus of claim 79, wherein the user-independent client-communication-system-specific identifier comprises a device-specific identifier.

89. (Original) The apparatus of claim 88, wherein the device-specific identifier comprises a hard disk identifier.

90. (Original) The apparatus of claim 88, wherein the device-specific identifier comprises an Ethernet address.

91. (Original) The apparatus of claim 88, wherein the device-specific identifier comprises a central processing unit serial number.

92. (Original) The apparatus of claim 88, wherein the device-specific identifier comprises a description of the storage characteristics of the hard disk.